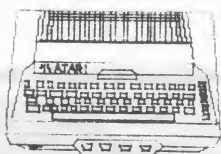
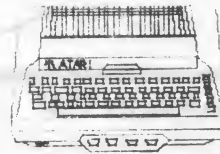


TAIG



ATARI REPRESENTATIVE



TAIG

AN ATARI REP. WILL BE ATTENDING THE AUGUST MEETING.
REMEMBER THE SEPT. MEETING WILL BE HELD ON SEPT. 22, WITH A
BRODERBUND REP. IN ATTENDANCE. TAIG/SPACE BBS PHONE 473-2897.

AUGUST 1985

TWIN CITIES ATARI INTEREST GROUP

PRESIDENT: DICK JOHNSON (521-0245) VICE PRESIDENT: JIM GLISH
SECRETARY: DAVID STENGEL TREASURER: PHYLLIS LANDSMAN
NEWSLETTER EDITORS: CORY JOHNSON & DAVID STENGEL

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TAIG

The TWIN CITIES ATARI INTEREST GROUP

084 Queen Avenue South
Richfield MN, 55423
NEXT TAIG MEETING
Sunday, August 25, 1985
TAIG 7:00 p.m.
at
The St. Louis Park Rec. Center
5005 West 36th Street
St. Louis Park, MN
NEXT NAGS MEETING
Wednesday, September 18, 1985
NAGS 6:30 p.m.
at
User Friendly Computers,
9465 Plaza Blvd.
Spring Lake Park, MN.

Remember . . .
SEPTEMBER MEETING DATES FOR BOTH
TAIG and SPACE have been changed.
TAIG, Sept. 22
SPACE, Sept. 22

Notes from the SYSOP

by Cory Johnson

The TAIG/SPACE BBS news to date.

1) An unnamed person used a sysops stolen password to download the password file, then deleted our copy, while keeping his own, so that's why everyone has had to log back on.

2) To combat this, we added some extra features, an extra level 25 password, no guest function. All of these mods went very well.

3) The above mods went so well that we (well, me and one other sysop) decided to add some new things, now the board has a last caller function, a REAL database, with 4 different datafiles, and a small problem, the boot up generates an error 9, and in our infinite wisdom, we didn't save a copy of the previously running board. So, during the debugging of the improved board, we have been running the original ForeM, and it has a tendency to like to generate errors, and not recover, that is why the system is down so often as of late.

Well, on to the good news, BBSCS is on it's way, and should be here very-very soon. BBSCS is the initials of a bulliten board system sold through Antic, whose real title is Bulliten Board Construction Set. Now, I know some of you are moaning, and saying "Why BBSCS, I've been on a BBSCS board and I prefer ForeM..." Well, I know BBSCS has some odd features, and the ascii log on can not be disabled, (oh, you have to log on in ascii, not atascii) but BBSCS is also a powerfull program, and it can be configured in almost anyway the sysops want. Besides, if we don't like it we can re-boot ForeM (if it works..). Now I can hear the sharp ones yelling at me, yes, you will have to re-log on, and go through all that mumbo jumbo, but,

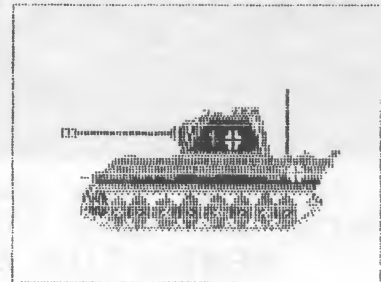
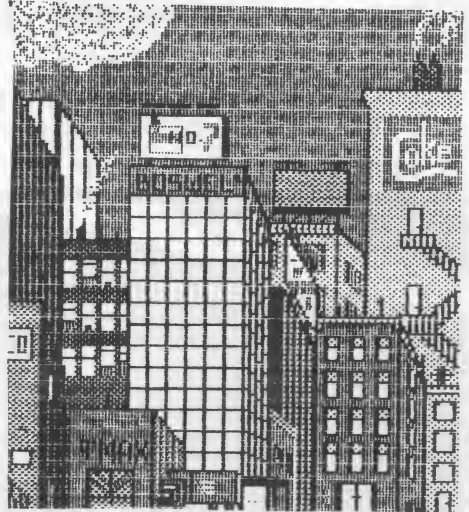
there will be benifits that out weigh the hassle, I plan to add a board JUST for TAIG and SPACE members, and we may have some higher access downloads that are available only to the club members, so you'll have to leave your membership number when you log on, so we can tell who are members, and who are the ordinary BBS hoping users.

Well, for fun, you can look at the chart below, to see how many users we have had on line since the move, and what days are the most heavily used, I had to use my 1020 for something usefull....

Well, happy telecommuting, and when, or if, you get on the board, [Y]ell, and maybe we can chat.

!REMEMBER!

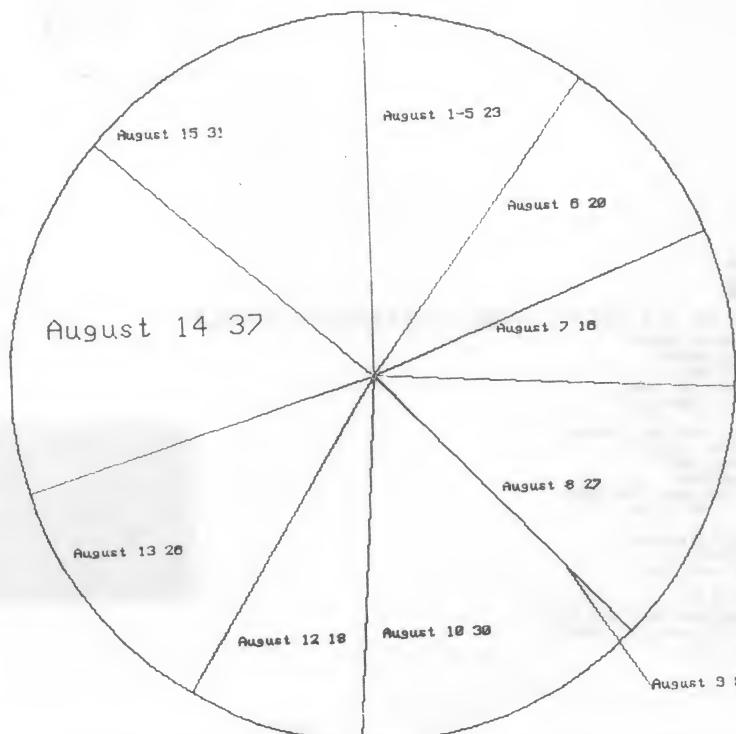
New phone number- (612) 473-2897



Pz Kw VG

RK

Taig/Space BBS use



SPELUNK
A BIASED VIEW OF A GREAT GAME
BY VIRGINIA KEITH

Oh God I made it! I really made it! It was only a couple of months ago I saw SPELUNKER demoed at the meeting and I said to myself you got to get that game. So my husband called one of the software stores and ordered it. Well I waited around the mail box with baited breath for my game to come But it came one day before I got home from work and GASP the U.P.S. man left it at the neighbors and you guessed it they were gone. Well finally they came home and I got my much awaited for game. It was slow going at first but after what seemed like for ever I had made it to LEVEL 3 (there are 6 Levels).

I was half way there but was stuck at the FALLS. No matter what I tried I died. Oh those blasted ghost always coming by at the worst possible moment. But lo -and behold I got by the falls and on to the SHAFT (I think thats what I was getting because now the ghost were coming steadily). I wanted to give up but something would not let me.

I was spell-bound by this blasted game (and loving ever minute too) I could not find how in blazesto get to the last level. All of a sudden I figured it out (really I found it by accident) I was entering level 6 The treasure room (I was beside myself with excitement) Oh can I do it!!!!!! Yes at 721,400 points I reached my goal. On the screen was a message I had finished. Oh God what fun. But now I have to wait and see if BRODERBUND will make a SPELUNKER 2. I hope so.

Notes from the Pres.

by Dick Johnson

Exciting things are happening in the World of ATARI and in TAIG. This month Charlie Devine our local ATARI Rep will be at the TAIG meeting presenting a color ST with a number of Demo's and software like GEM Draw, GEM Write, Huba products, and even a CASIO keyboard to be used with the MIDI interface.

Next month we will have a special meeting on Sept 22nd (SPACE will have thiers on the 20th) at which we will have a Rep from BRODERBUND coming to town to address both clubs and Demo thier products for both the old and new machines.

Since righting my articial on my 1st impressions of the ST I have found out that the ST operates twice as fast as the MacIntosh, and that delay were built into the ST's Logo language so that people would be able to watch it draw. This is very incourging as you might have guess I was beginning to wonder a little bit myself.

Now don't forget Aug 25th 7PM at the ST. Louis Park Rec Center for the best show in town, what the ST can really do.

See You There!!! Dick Johnson
- Pres.

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** CHRIS CRAWFORD **

Lesson 1 - Continued

USING AN ASSEMBLER

There are three steps involved in writing an assembly language program: editing, assembling, and debugging. Editing is the process of typing in your assembly language statements. Assembling is the invocation of the assembler. Debugging is the process of running your program and analyzing why it

doesn't work. Thus, the entire process of writing an assembly-language process can be described by a fictitious BASIC program:

```
FOR I= 1 to 1,000,000,000...  
EDIT PROGRAM  
ASSEMBLE PROGRAM  
DEBUG PROGRAM  
NEXT I
```

THE 6502 MICROPROCESSOR

The first item in the 6502 that I will describe is the accumulator. This is a single one-byte register in the 6502. It is the central workbench of the microprocessor; almost everything happens in the accumulator. Your first three instructions on the 6502 are:

LDA address (Load the Accumulator with the contents of address)

This instruction loads the accumulator with the contents of the memory location specified by the value of address. The address can be specified by either an outright value, such as \$0600, or a symbolic reference, such as FISH, where the value of FISH has been previously declared by, say, an ORG statement or an equate statement.

LDA #value (Load the Accumulator with value)

This is much like the earlier statment; it loads the accumulator with a number, only the number loaded is specified immediately rather than stored in a memory location. Thus, the command LDA # 9 will put a 9 into the accumulator.

STA address (Store the Accumulator into address)

This command will store the contents of the accumulator into the RAM location whose address is specified in the command. It is just like the first command, except



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ASSEMBLY LANGUAGE - LESSON 2

** 6502 ARITHMETIC **

NUMBER SYSTEMS

that the direction of data motion is reversed. The LDA command is like a read, which the STA is like a write.

You are now equipped to move data around inside the computer. These commands will allow you to read data from one area of memory and store it into another. LDA and STA are the two most common instructions used in any 6502 program.

Exercise: Write a program that will read the contents of address \$FE00 and store the result into address \$6B0. Your biggest problem here will be just getting your assembler to work. Therefore, I will give the answer away:

```
ROMADD ORG $FE00
RAMADD ORG $6B0
ORG $600
LDA ROMADD
STA RAMADD
BRK
END
```

That's the program. Try to get it running with your assembler.

Decimal	Binary
0	0
1	1
2	10
3	11
4	100
5	101
6	110
7	111
8	1000
9	1001
10	1010

In binary, instead of having ones, tens, and hundreds places, we have ones, twos, fours and eights places. It takes a lot more digits to express a number in binary, but then again, we have only the two numerals 0 and 1 to work with, so what does one expect?

The hexadecimal number system is a base-16 system. In this system, you count from 0 to 16 like so 0,1,2,3,4,5,6,7,8,9,A,B,C,D,E ,F,10. The 10 in hexadecimal really means 16 in decimal. So 10 is 16, right? Black is white, truth is lies....stay with assembly language long enough and you'll believe anything.

Actually, it's easy to avoid confusion. We use little prefixes to tell you and the computer whether a number is expressed in decimal, binary, or hexadecimal. No prefix means decimal. A \$ prefix means hexadecimal; a % means binary. Thus %10 means 2 while \$10 means 16, but 10 means just plain old 10. Hexadecimal is not hard to learn at all; if you go into any store you will see that they use hexadecimal on all their signs.

In this lecture I will take up the problem of arithmetic on the 6502. I choose this topic only because it is fairly simple to do on the 6502. There are a couple of nerve-jangling problems associated with 6502 arithmetic, but I will breeze over those in a very cavalier fashion.

Before we can do arithmetic, though, you must know a little bit about number systems. There are three that you must know: decimal, binary, and hexadecimal.

Decimal is the standard number system you have used since grade school. You count 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and then you reach 0 again, so you put down a 1 in the tens place and resume counting from 0.

Binary works the same way, except that there are only two digits, not ten. The two digits are 0 and 1. You count 0, then 1, then you reach 0 again, so you put down a 1 in the twos place and resume counting from 0. Thus, counting from 0 to ten in binary like this:

ADDITION AND SUBTRACTION

Addition with the 6502 is very simple; it uses the ADC instruction. This instruction means "Add with Carry"; I'll get to the Carry part in just a moment. For now, let me explain the instruction. The ADC instruction has an operand, normally a location in memory. When the instruction is executed, it takes the contents of that memory location and adds that value to the value in the accumulator.

It leaves the sum of the two numbers in the accumulator. This of course destroys the old value in the accumulator. You can use the immediate mode of addressing with the ADC instruction, in which case it adds the value itself. Thus, "ADC # 9" will add a 9 to the contents of the accumulator, while "ADC FISH" will add the contents of address FISH to the accumulator.

Subtraction is just like addition. The instruction to use is SBC, which means "Subtract Borrowing Carry". Again, I'll tell you about the Carry part in a moment. This instruction subtracts the operand from the contents of the accumulator, leaving the result in the accumulator. It also can be done in either immediate mode (e.g. SBC#5) or absolute mode (e.g., SBC GOAT).

WORD LENGTH PROBLEMS

If that were all there were to arithmetic with the 6502, programmers would be paid a lot less. The first killer problem is that the 6502 uses 8-bit words; that is, the numbers that the 6502 stores and works with are only 8 bits wide. This means that the biggest number the 6502 can comprehend is 255. Uh-oh! What happens if you want to have a checkbook balancing program and you have more than \$255? What happens if you get more than 255 points in your "Decapitate the Orphans" game? In fact, what happens if you just ignore the limit and add, say, 10 to 250?

Well, believe it or not, the 6502 will give you an answer of 4. Why? The number system that the 6502 uses is like a wheel, with 0 at the top, counting clockwise 1,2,3,...all the way up to 255, which lies right next to the 0. If you go up from 255 you just wrap around past the 0 and start all over. Similarly, if you subtract 2 from 0, you'll get 254.

The solution to all this is provided by the Carry bit, discussion of which I've been putting off until now. The Carry bit is a flag that the 6502 uses to remember when it has done arithmetic that carried it over the boundary between 0 and 255. By using it properly, you can solve your arithmetic problems.

The first trick to using the Carry bit is to use multi-byte words. This means that, instead of using a single byte to store a number, you use several. For example, if you use two bytes to remember a number, you can store a number as large as 65,535. three bytes lets you go to 16,777,215. Four bytes lets you go to 4,294,967,295. big enough for you?

To use multi-byte arithmetic, you set up a series of additions or subtractions. Suppose, for example, that you want to add two two-byte words. The program fragment to do this would look like this:

```
LDA    LOFISH
CLC
ADC     LOGOAT
STA     LOANSR
LDA     HIFISH
ADC     HIGOAT
STA     HIANSR
```

This little fragment of code assumes that the first two-byte value is called (LOGOAT, HIGOAT), and that the second is (LOANSR, HIANSR). The new instruction, CLC, stands for "Clear Carry" and it means that the Carry bit should be set to 0. It should always be used with all additions except chained additions like this one.

The code does the following: first it adds the two low values. If the addition resulted in a wraparound (result greater than 255), then the Carry bit was set; otherwise, it was cleared. Then it performed the second addition, adding in the value of the Carry bit (That's why we call it "Add with Carry"). Thus, if a wraparound occurred, an additional one was added into the high sum. This system insures that multi-byte addition works properly.

For subtraction, you use the SEC instruction ("Set Carry"). Otherwise, you handle subtraction the same way that you handle addition. In both addition and subtraction, though, the low bytes must be handled first, then the higher bytes in the proper order (lower to higher).

DECIMAL & SIGNED ARITHMETIC

There are two variations on standard 6502 arithmetic. Both are so rarely used that I will not treat them here. The first is decimal arithmetic using the Decimal flag. This allows you to set up an automatic decimal adjust mode. This is useful in certain types of arithmetic, decimal adjust mode. This is useful in certain types of arithmetic, primarily BCD arithmetic.

If you don't know what this is, don't bother with the Decimal flag. Your program should always begin with the instruction CLD, which means "Clear Decimal Flag". I will tell you this just once: failure to clear the decimal flag is the source of the most frustrating and impossible-to-trace bug in the 6502. Every single program should start with the instruction CLD.

The second arcane bit of 6502 arithmetic is signed arithmetic. It uses the V flag ("oVerflow"). Signed arithmetic is always confusing and seldom useful. In 7 years of working with the 6502, I have never had need of it. Don't bother.

LIMITATIONS ON 6502 ARITHMETIC

There are quite a few limitations on 6502 arithmetic. There is no facility for multiplication and division; you have to write subroutines to do that. You must design your programs to make do with 8-bit words; failing in that, you must use multi-byte arithmetic, with its consequent price in speed and RAM. All in all, arithmetic is a real pain on the 6502. This is the major reason why most 6502 programs do so little arithmetic.

Letter's to the editors
by, the editors

The following letters were sent to us, in the hopes that we could answer them, we will try, but if any of you can supply a better answer, please let us know.

Dr. Mr. Stengel;

Your name was referred to me by the Atari Corporation in regard to a User's Group Organization. It seems that your's is a little far away.

I can't help but wonder, however, if you know of anyone around there that has a packet radio set up. I would like to get involved with one in the TC area.

Larry L. Bushnell

(ED) Well, neither of us know of any Atari groups closer to Cloquet. If anyone knows of one please let us know. Have you considered forming your own group? And, guess what, neither of us knows of anyone with a packet radio set up, members?

My equipment home computer Atari is 800xl, program recorder 1010, and printer 1027 letter quality.

My problem is:

ERROR 138 message in TV screen during loading procedure.

HELP ME

J. Javier Farah de Anda
Tepic, Nayarit Mexico

(ED) Well, it is flatering to see that we get out of the local area, the best answer we could find to your problem, is quoted from the "Atari 1050 Disk Drive Disk Operating System II Reference Manual:"

"138 Device Timeout. When you sent the command...the device did not respond... If the device is a cassette, the tape baud rate may have been mismeasured or the tape improperly positioned." Unfortunately, this tells you why you get the error, and not how to recover. So, we hit the manuals, the BASIC reference manual told us nothing, but in the "Atari 1010 program recorder owners guide" we found this, "If you get an Error 143 or Error 138 message on your television screen during a loading procedure, your tape leader (the non-magnetized strip...) may be too long. As a result, the computer may be trying to read data where none exists. Rewind the tape to the beginning, then advance it approximately 10 counts. Now begin the loading procedure." Well, I hope that helps, if it doesn't, you'll have to take the cassette recorder in.

Finally, I got a phone call concerning the article we ran last month about the 1030 ring detector, we were pleased to be able to give the information on this device to you, but we neglected something, software, if anyone has, or knows how to make the mods to either Forem or Amis, please let Dave or I know.

The last letter we recived concerned "Vars Revenge" on a 2600 game machine. The screen you found was the secret screen with the authors initials, I know of a similar screen in "Adventure" and assume that they are in other games also. Hopefully this will be the only 2600 question we recive, because it is the only one that will recive newsletter space. TAIG is a group that supports Atari computers, not Atari Game Machines, believe it or not, there is a difference, and no

matter how much you wish to haggle about it, my view is that the 2600 simply is not a computer.

Little things I didn't know about.
by Cory Johnson

Well, Dave and I have been editing the newsletter since December, and it seems we learn something new everyday, todays lesson was, a free disk. Much to my suprise, I found out that those who have thier article published in the newsletter are eligible for a free disk of the month. Now, a premium I didn't even know existed, so, here is a list of those eligible.

Lee Raabe

Mark Simonson

Peter ZenankoBen Porter

Gary Robinson

Niel Bradley

Well, that's the list, big huh, those who have thier articles published this month will also be eligible, but I don't have thier names available at the vurrent time. Club officers are not eligible for the free DDM.

Other startling news, I may have not been paying attention, but the TAIG members can place FREE clasified ads in the newsletter, if you wish to have an add placed, call the EBS and leave a message to the sysop, write either Dave or I (use OUR address' and not the clubs, it will take approx. 1 month for us to recive mail addressed to us in care of the TAIG address) or call VOICE 473-4190. It's not really that hard. So, our address' once again...

Cory Johnson 1835 Shadyview Circle,
or
Dave Stengel 3230 Shadyview Lane,
Plymouth MN, 55447.

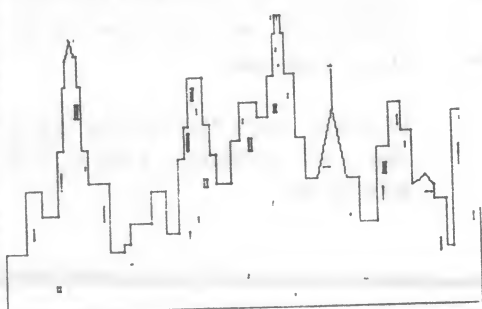
WANTED

USED Atari 800 or 800XL and a few 1050 drives. Will pay up to \$60 for the computer, and \$100 for the drives. Call 473-4190

How not to be seen
by David Stengel

Well, the meeting started with Dick saying, "Hey, get over here!" A few new software titles were listed to be available for the 8 bit machines (that's the regular Atari 800, 400, XL, and XE to you and me). These include Loderunner Rescue, Print Shop Data Disk #2, Voice Master, and Voice Harp. A few ST titles are expected in the near future (of course you wouldn't want to know what they are would you? I knew you wouldn't. I can't remember them anyways). After a few minutes of rambling, the stage was finally open to any questions. Many interesting questions and topics were brought up at the meeting, though I guess you will never know just what they were (sorry, but I lost my notes). Then, after all was said and done, a ST was demo'd off, with hardly any Demos, but the good stuff is soon to come. After that, who knows what happened, because I left just before the demoing of the ST. I suppose everybody went home, or did something fun happen that I don't know about...hmm? If you stuck with me this far, well then you must realize that if this can get published, anything can (chuckle). I think I said enough. Oh yea, those who didn't get the Bare Essentials can return the Public Domain disk they did get in return for it. Also, Alternate Reality will be made by Datasoft and MPP has reformed as the Supra Corporation.

Ed notes: Please excuse Dave, because this is his first time being secretary, and he can only time 35 words a minute, and he looks horrible in a mini-skirt.



Translator Programs By Mithrandir

The topic I would like to discuss is the Translator. There are 4 translators that I know exist. The first one comes from Atari. It is a no frills translator that comes with two versions on the disk. Version one is the Rev. A operating system (O.S.), and the second version is Rev. B. The translator serves it's purpose- it allows you to run software that you normally would not be able to run on the XL computers. The incompatibility is because some companies (and individuals) did not follow Atari's advertised vectors. These vectors are break-in points guaranteed not to change on future O.S.'s. Many companies took short cuts, by breaking into the O.S. and using parts of it, instead of putting the code into their programs. This worked fine until the 1200 XL came out. Suddenly their programs wouldn't work. Atari, realizing that a problem existed, released the Translator.

The second Translator is the "Fix XL" from Gardner Company (now also available from Antic magazine #PD026 for \$10.00). This one only gives you the Revision B O.S. This is really no problem- I have never needed to use the Revision A O.S. anyway. The main advantage to the "Fix XL" is that it is a Dos file. This allows you to put it on the disk with your programs. The program is 90 sectors long, but this still leaves plenty of room for your programs.

The third translator comes from Analog Computing magazine, issue 32 (July '85). To use this translator you will need access to a 800 with Revision B O.S., or you can use a XL/XE computer and the Atari Translator disk. The program maps

the 800 O.S. and stores it in a dos file. The main advantage to this translator is that it copies the O.S. from the 800 computer. If you run the program on a 800 system that has a Fast Chip installed, your homemade translator will also install the Fast O.S. into your XL/XE. To use the XL/XE and the Atari translator, you need Analog magazine issues 32 and 34. Issue number 34 has the necessary line changes to allow you to use the Atari translator to make a homemade translator. The Atari translator has 12 bytes that are different from the real O.S. The changes in issue 34 correct this.

The fourth translator program is called the "XL FIX," and is made by Computer Software Services (and sells for \$49.95 cassette or Disk-\$69.95 Cartridge). It is basically the same as the last two programs (except it doesn't have the Fast Chip option). This BIG difference here, is that you can get it in Cartridge form. This can be handy if you do a lot of disk swapping. The 2nd, 3rd, and 4th translators also allow you to use the extra 4k of RAM, while the Atari translator does not. This extra 4k of RAM is located at \$C000-\$CFFF. It cannot be used for Basic, but can be used for Machine Language, or with Word Processors and Spread Sheets. Also the 3rd and 4th (if you get it on cassette or disk) claim to work with Cartridges. I have not tried out this function (I don't have any cartridges that need it). If you have any questions, or you want the "Homemade Translator," call (modem) the Atari Barn East at 788-3036, or the Atari Barn West at 521-5398. Address your questions to Mithrandir.

(ED NOTE) There is a 5th translator called the 'XL BOSS' from Allen Macroware, this is a replacement OS for the 600XL or 800XL.

Then there is also the Ramrod XL which is actually 3 OS's, and can come with 'OmniView'.

Reprinted from Space

Beginners'
BASICS #4

by Bob Floyd

This is my last installment of this column. I've run out of topics after these. I'll cover 3 subjects, output of text files to screen or printer from DOS, some unusual control keys, and output to printers from BASIC.

If you purchased DOS 2.5 or an ANALOG DOM from the club last month, you may have been surprised at the style of documentation. This required that you go to the DOS menu and choose item "C". This is the "copy file" function. Unless you have 2 disk drives, you have probably never used this function. The trick here is that you can name the source DEVICE:FILENAME and also the destination DEVICE:FILENAME. So, if you want to print a text file (i.e., all ASCII characters) on the printer, you use the following after typing C and <RETURN> :

D:FILENAME.EXT,P:

The "D:" is the source device, FILENAME.EXT is (of course) the source filename and "P:" is the destination device. Note that if P: or S: (for screen output) are used as destination devices, no filename is used. P: and S: are ATARI device names for printer and screen. Output to your screen or printer may look a little odd if the line width of the file does not match your destination device. If you are trying to create these sort of documentation files, it is simplest to use a word processor that allows "printing" to a disk file. The resultant file will have the same margins, line width, blank lines, etc. as you had specified. HOMEPAK has this capability, as well as others. Unfortunately, ATARIWRITER cannot do this.

You can also use option "C" to create a short text file. After typing C and <RETURN>, enter the following:

E:,D:TEST.TXT

The E: is the device name for the screen editor. Output is to the default drive and filename TEST.TXT. To end entry of text, press <CTRL>-3. This signals the "end of file". That was my clever lead-in for the second topic of this column, control keys. These are:

<CTRL>-1 Pause and unpause
<CTRL>-2 Beep the speaker
<CTRL>-3 End of file

You already saw <CTRL>-3. <CTRL>-1 usually will pause and unpause most things. You will have to try it to find out if it works on a particular program. It also works during the LIST command.

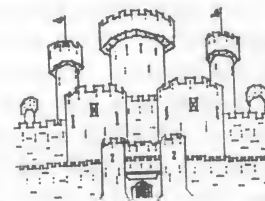
<CTRL>-2 merely beeps the built-in speaker of the 400/800 series or beeps to the screen's speaker of the XL and XE series.

If you have ever tried to use the LPRINT function in ATARI BASIC, you have probably noticed that you cannot use the comma and semi-colon in the normal way to space your output on a given line. An odd spacing results. This is because ATARI BASIC opens and closes a channel to the printer for each and every LPRINT it encounters. This is the cause of the weird spacing. To get around this, it is simplest to open your own channel to the printer and not use LPRINT at all. To do this, use the following statements as examples for opening such a channel and then outputting to the printer:

OPEN #3,B,O,"P:"
PRINT #3;N

The first statement opens channel 3 (this could be some other value <=5 that is not already in use) for output to the printer. See Lon Poole's Your ATARI Computer for details of the parameters used in the OPEN statement. The second statement prints to channel 3, which was assigned to the printer. This type of print statement can be used in the usual fashion incorporating commas and semi-colons for good control of spacing. When done printing, use the CLOSE #3 statement to close the channel (the END statement does this also).

THE END!



Notes from Ed
by David J Stengel III

Do you think we think we're serious? I know that you think that I know that you think we're not serious. Anyways, I got tons of MAIL !!! Not much of it was in article form, but hey...mail is mail, you know? But we did get articles, which is good, so thanks Virginia, Jeff Gottstein, and Mithrandir (whoever you are). I had to retype an article, but you see I don't mind doing it because

it's my job. So like send some articles written on paper or something. Also, what really spiffs-up a newsletter are Koala Pad, Touchtablet, or Micro-Pianter, or any kind of computer art (especially ST), you don't even have to dump them out, just give us the file. Good deal!

Ed notes: Sorry this article is so short, but incredibly, I don't have much to say.

THE ATARI 520ST MY 1ST IMPRESSIONS

by Richard Johnson

The first thing you should ask is why should I buy a computer which has absolutely no software, no track record to go on. In brief I would not recommend buying a computer like that, so why did I buy one? Number one I've always wanted a computer with the power of a MacIntosh or a IBM PC but couldn't afford the price tag. And not only that but it seems that the higher the price of the hardware the higher the price of the software. And then ATARI announced the 520ST and its policy Power Without the Price, and it looked to be the answer to what I'd been looking for. So after watching the claims changes in direction and reviews, the machine was finally offered to the public and I placed My order so that I could be Pioneer on the 520ST. But we have a saying in the Data Processing industry. "You can tell a Pioneer by the number of arrows in his back".

You pay a price to be out there in the leading edge of a new product, which can some times be a little frustrating. But I figure that I'll take a few less arrows since the ST is based on some fine products which have been tested in other products.

The ST is a nice looking machine with nice clean lines and a easy to use operating system. Not to mention some very big surprises. Such as the build in screen dump, which was used to produce the sample screen shown with this article. You will also notice the highlighted line labeled "VT52 Emulator". This is a standard terminal configuration which now allows me to access BBS's and many Mainframe computers from home in 80 col mode.

As they say one picture is worth a thousand words, and the GEM

system certainly does that. For example say I want to back a backup copy of a disk. Using the mouse I place the arrow on FLOPPY DISK A, press the button down, move the picture of A to B and release the button. From there I just follow instructions on changing disks till done. Copies of files are done the same way and of course use the TRASH can to delete files. As you can see you can also rearrange the screen to any configuration you wish and any size window. Each window is actually a view of a full screen and can be repositioned very easily to see what is not current visible, or at the touch of the mouse the window will fill the screen or resume its former size and position, which of course you have full control.

The 3 1/2 disk drive is a real joy. The disk its self is inclosed in a hard plastic case with no exposed disk area to accidentally touch, a sliding tab used to write protect the disk, 360k of storage memory, and fast. It loaded 206,554 bytes of memory in 30 seconds and that includes the time it took to start and stop the drive.

The keyboard is standard size with a separate 10 key pad and separate cursor control key which can also be used to act like the mouse.

I had a chance to see the color version last week at User Friendly, which looks very nice but a little funny as the graphics were twice as high in medium resolution, and twice as wide in low res. But the color more than makes up for it.

Now about the arrows (ouch). Logo which comes with the machine I feel will never be the language of choice for any computer, except for schools and for drawing neat little pictures. Especially one as slow as the ATARI ST version. Using a sample program from Compute which was used to demonstrate the difference between a compiled version of Logo on the MacIntosh (19

secs) and the interactive version on a Apple IIc (4 mins) I felt sure that I would beat out the Apple. After all its only a 8 bit machine where the ST is 16 bits at least twice as fast. (Ouch that arrow hurts). The ST clocked in at 7.5 minutes. Why so slow? I'm not sure maybe a poor version of Logo, maybe overhead of the desktop. If not Logo what will be the language of the ST. To be sure BASIC will be in there, It's by far the most use language of the every day computer duffer today. Easy to learn and english orientated. How about Assembler? If you what to have a fast arcade style game on any of the 8 bit machines, it has to be written in assemble, Right? Will actually no. To be fast it has to be compiled, which is fairly easy with Assembler as each code translates to one machine instruction. To compile languages of more complexities therefore often requires more machine than the poor 6502 chip can handle. Assembler on the 8 bit machine was a necessary evil, hard to learn and use, but fast and core efficient. With the larger memory available on the ST and other 68000 computer compilers of many types will become available. Of these the most talked about are "C" and Pascal. Both very similar in nature "C" seems to have the edge at the present time, having at least 1 compiler available with the development package and 2 or more announced. As far as learning these languages are concerned, I did a little informal survey at my local B. Dalton, counting the number of books on these languages. Results Logo 3, "C" 23, Pascal 22, BASIC (to many to count).

Software (ouch) there is none, Yet! And it will be a while before you have choices between similar type packages. But I hear that there will be an ST version of my personnel favorite: HOMEPAK. The only problem with HOMEPAK has always

been its lack of memory for documents, which should be of no problem on an ST.

Hardware (ouch) prices on extra Disk drives have gone from a announced \$100 at the Jan CES to \$300 today. That \$500-600 hard disk is sounding better all the time. Also my screen shakes, I've been told it will be replaced but can be given no time frame as to when the replacement will arrive. I could perhaps use my other monitor, but have been unable to find the 13 pin plug required hook into the ST (ouch). I had planned to save a little money by hooking into my TV set when I wanted color for games and the like, but they dropped the RF modulator due to FCC problems so I'll have to get some kind of add-on (ouch).

Well I've gotten a lot off my chest, took a peek into the future and hopefully have answered a few questions you may have about the ST. Would I do it all over again? Sure I would, because I believe in this machine. All it needs a little time and the right software and it could replace every Macintosh around.

Next month I'll compare the ST to the Amiga.

BRAND NEW... JUST ARRIVED

ATARI 520 ST

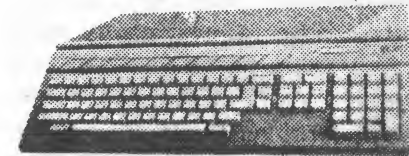
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What to do once you have

The ATARI 1020 Color Plotter

Review by Cory Johnson



When one mentions that he either owns, or is thinking of purchasing a 1020 color plotter, he (or I at least) usually encounters short stints of giggling from the person you are talking to. So, I thought I'd review this remarkable little machine, and try to set the record straight.

The 1020, is not a modified 820, the 820 was a 40 column dot matrix printer, that never became very popular except with sysops. The 1020 is an honest to goodness 4 pen color plotter, notice, pens. The 1020 actually DRAWS every line as a line, and when printing (oh, this article is being WRITTEN on a 1020) it really does print, every character is print before it goes on to the next. This makes the 1020, you guessed it, slow, but then you own a printer to print, and a plotter to plot, so let's get to the pictures.

The 1020's resolution is I found astounding, but the software that came with it was severely lacking in just about everything. So, my 1020 sat on a shelf collecting dust for 2 months. Then, suddenly, I find a program called "Paint & Draw" from Terrific Software, this program makes it worthwhile to own a 1020. It supports a typesetting program, which I am using now, but it also has a pie-chart generator (see notes from the Sysop for an example) and it DUMPS PICTURES! Oh, oh, it only supports "Graphics Magician," darn, no, for another month I've dumped out the 28 pictures that came on the with the disk. The pictures contained are very good, from the Atari 800, to castles to wizards to space shuttles and robots. If you have a 1020, this is truly a little worth having. But, gosh, I wish it would dump Micro-illustrator files (do you get the feeling that I'm not telling you something?). Well, Antio now offers a program called "Screen Plot," and this supports Micro-illustrator, B/Graph, Atari Paint, Atari World, and Micro painter. Sounds impressive huh, well, I don't know it hasn't arrived yet.

So, I can hear you saying, "Well, let's see what it can do." The pictures printed here are all from the "Paint & Draw" program, and were dumped in black, so that the colors wouldn't affect the readability of the newsletter. Hopefully, next month I'll be able to review "Screen Plot".

File View Options

Desktop Info...

Control Panel
Set RS232 Config.
Install Printer

233204 bytes used in 5 items.

DESK2.ACC

DESKTOP.INF

SAMPLE.FRG



Children

Will

Play



Well, it certainly has been a long time since I have had a chance to talk with you. As you can tell (at least I hope you can tell) I have finally acquired my Newsroom program. Unfortunately, it was not for the Atari brand of computers. Sigh. This section of the newsletter is being done on my IBM PCjr. Springboard Software is the manufacturer for this program and they seem to have no plans whatsoever of translating this program for the Atari. All we can really do is hold our collective breaths and maybe bug them a little about it. They are a locally based company (Bloomington, MN). Give them a call.

Now that we have that little chore out of the way, we can talk about new happenings in the world of Atari. THE ST'S ARE FINALLY OUT!!!! How is that for an opening? Yes, the hope of Atari's future existence has arrived in the stores. Both User Friendly and Wizard's Work got some in and, boy, do they look nice. I am not going to try to be rah rah Atari, but, they look like they have done a fine job on this machine. The graphics are sharp, the sounds are crisp, and the features are heaped on-board. I am sure that other people will be giving reviews of the final versions of this machine. At the price they want for the machine, I think it will be a winner.

Let's see now, what new software has arrived in the last few months? Well, there is a nifty program that I know a lot of us have been waiting for. The Bulletin Board Construction Set is now available. If you have ever wanted to design your own BBS, then this program is definitely for you. With this program, you can define how your menus will look, what options will be available in what menu, different security levels, and other very handy features. I can honestly imagine this program will become the standard BBS program for all Atari systems no matter what DOS, type of drives, or whatever. It is that flexible. One caveat, the documentation is truly horrendous.

I don't really blame the author of the program for the lousy docs. I blame Antic magazine and Eric Clausen for the poor presentation. Eric because he just does not seem to be able to convey what he is trying to say in English and Antic because of their stupid documentation system. It is truly ridiculous to have to sit by the computer to hit return after every page is printed. This would not be too bad if the docs were short, but on such a program as this, with many pages of type, it tends to be a real hassle. Antic should really have considered making an exception with this program and sell it with already printed manuals. Ah well, I suppose they can be commended for trying to keep the costs down. Nice program.

Another handy program that just came out was Basic XE. This is a new version of Basic XL written by OSS exclusively for the Atari 130 XE. This cartridge basic WILL support the extra programming ram available in this machine. The basic is one of those Supercartridges along with a diskette. On this disk, resides part of the basic. Nothing really essential but real nice to have. For the life of me, I can not understand why they could not have made it a bigger cartridge as was done with Bounty Bob Strikes Back (I STILL CAN'T GET BY LEVEL 14!!!!). To their credit, it at least loads in the ram underneath the cartridge. Nice basic and probably a must for 130 XE owners.

What programs are you waiting for? I am waiting for two in particular, Ultima IV and Alternate Reality. Latest I heard was Nov. 9 for Alternate and no release date set for Ultima IV. Are you maybe waiting for Mindwheel from Synapse? It is out now, but it needs two drives to run. Or perhaps you might like a good game of chess? Sargon III is out now. Or might you be the racing sort? On Track Racing from Gamestar is available. Not to mention Tapper and Spy Hunter. Who says nothing is being made for the Atari? Even Electronic Arts is getting back into the swing of things (But their programs will not be available for awhile). Keep the faith! Phil Seifert



A Little Bedtime Story



by Phil Seifert

I wish these were the good old days. You know the time period I am talking about. Or are you one of them? A person just cannot tell anymore. Ah well, what difference does it really make in the long run?

It was glorious back then, no waiting in lines to play the machines, no joystick tendonitis, and no eye screen burnout. Hell, no one even knew who Jack Tramiel was then! Are you familiar with this story? You aren't? Good, it would be nice to pass this on to someone.

Long time ago, roughly 45 years ago, the world was quite different. People actually ran everything. Video games were just a gleam in Nolan Bushnell's eye. We had Presidents and Secretary Generals to decide our fates. Oh, it wasn't so bad. After all, they were separated by half a world. There was the good ole U.S. of A. and the Soviet Union. What? They didn't teach any history in any of the music videos? What is this world coming too?! Here, I will draw you a map and show you.



There, now does that place things in their proper perspective? I kinda thought it would. Of course, you must have seen this map on many of the games you play now, right?

Anyways, back then, the people decided who would screw themselves up for them. That is not to say that they all chose the same person or thing to do it. Some people chose presidents. Others banked their futures with football teams. It was such fun. Football? Oh, that was a game quite similar to the video game TEN YARD RUN except it was played with real people, not sprites on a video screen.

Yes, people were quite free to do what they pleased. Then it happened. Atari (may its name live forever) started to founder. It was a virtual basketcase. No, I am not spreading heresy, this is the honest to Atari truth. The country ran

on a system called free enterprise. Men and women were forced to go out and make money doing various sundry chores. Some baked bread, some sold computers (blessed are they) and some even designed clothing. With this money they earned, they were expected to purchase their own food, clothing, housing and other necessities. Yes, some even played video games back then.

Well, Atari was in deep trouble. They were a company that made money selling video games and computers. Unfortunately, they also had some stiff competition like the arch-daemons Apple and IBM. The blessed Atari was about to catch the dreaded disease, CHAPTER 11! But then came the saviour, Jack Tramiel. He was one of the few who saw hope. The company was purchased in some fantastic maneuvering by Tramiel. Immediately things began to change for the better. Many people were layed off. Many bills were collected and many forgiven. The first of the wonder machines were made, the Atari 520 ST. I am still not sure if we took the right path back then, but, Atari was saved from financial disaster. Many took that as the first sign of blessedness. Eventually, the whole country was taken over by these machines. Little did we realise what we were doing. Slowly, our addiction grew. Soon, it became impossible to live without playing at least 1 hour of games per day.

People eventually got to the point where they were starving, so great was their addiction. Fortunately, or unfortunately depending on your point of view, Atari announced many new wonders. Computers to harvest our food, computers to educate our children, computers to administer to our needs, and even computers to choose our mates! At last, perfect harmony and utopia. No more having to worry about other people getting in harms way. This is what most people think. BUT NO! We shouldn't do this! Where will it end? Man was not created to be ruled by machines. Man was not created to have to sit in front of a video game just so that he could eat. What would happen to those who have no hand to eye coordination? Man should be free to decide his own future, not have it decided by some whimsical electron floating around in some silicon. It is time to revolt! Fight back before it is too late! Who side are you on? If you are on mine, I would be most happy. I hear there is another beacon of hope out there. She is called Amiga. Do you know of her?

Good night and pleasant games.